**User Manual - Fake Job Prediction**

**Overview**

This project focuses on predicting whether a job posting is fake or real based on various features, utilizing both traditional machine learning and deep learning techniques.

**Project Structure**

**Notebooks:**

Fake\_Job\_Prediction.ipynb`:Jupyter notebook containing the main code for data analysis, preprocessing, and model training.

**Data:**

`fake\_job\_postings\_og.csv`: Original dataset containing job postings and associated features.

**Results:**

`Plots`: Directory containing visualizations generated during exploratory data analysis.

`Models`: Directory containing saved model weights and architecture.

**Libraries Used**

TensorFlow and Keras: Implementing deep learning models (LSTM, CNN).

Scikit-learn: Training traditional machine learning models (Logistic Regression, SGD, Random Forest).

Matplotlib and Seaborn: Creating visualizations during exploratory data analysis.

NumPy and Pandas: Data manipulation and preprocessing.

NLTK: Text preprocessing for natural language data.

**Google Colab and Drive**: Collaborative coding environment and dataset storage.

**How to Run**

1. Open and run the `Fake\_Job\_Prediction.ipynb` notebook in a Jupyter environment.

2. Ensure the required libraries are installed using `pip install’

3. Customize the notebook as needed, considering dataset paths, parameters, and model configurations.

**Results**

Model performances and visualizations are available in the notebook.

Saved models and plots can be found in the respective directories in the "Results" section.

Note: Running the entire code takes approximately 10 minutes.